

## **SECTION 11451**

### **RESIDENTIAL APPLIANCES**

#### **PART 1 - GENERAL**

##### **1.1 SUMMARY**

- A. This Section includes the following:
  - 1. Microwave Oven
  - 2. Under counter Refrigerator
- B. Related Sections:
  - 1. Division 15 Sections for plumbing connections, drainage plumbing connections, to residential appliances.

##### **1.2 SUBMITTALS**

- A. Product Data: For each appliance type required indicating compliance with requirements. Include complete operating and maintenance instructions for each appliance.
- B. Appliance Schedule: Submit schedule of appliances, using the same room designations shown on Drawings.

##### **1.3 QUALITY ASSURANCE**

- A. Installer Qualifications: An experienced installer who is an authorized representative of the residential appliance manufacturer for both installation and maintenance of appliances required for this Project.
- B. Source Limitations: Obtain residential appliances through one source from a single manufacturer.
  - 1. Provide products from the same manufacturer for each type of appliance required.
  - 2. To the greatest extent possible, provide appliances by a single manufacturer for entire Project.
- C. Product Options: Drawings indicate sizes, profiles, and dimensional requirements of residential appliances and are based on the specific types and models indicated. Other manufacturers' appliances with equal performance characteristics may be considered.
- D. Electrical Appliances: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- E. UL and NEMA Compliance: Provide electrical components required as part of residential appliances that are listed and labeled by UL and that comply with applicable NEMA standards.
- F. AGA and ANSI Standards: Provide gas-burning appliances that carry the design certification seal of AGA and that comply with ANSI Z21-Series standards.
- G. AHAM Standards: Provide appliances that comply with the following AHAM standards:
  - 1. Refrigerators and Freezers: Total volume and shelf area ratings certified according to ANSI/AHAM HRF-1.
- H. Energy Ratings: Provide residential appliances that carry labels indicating energy-cost analysis (estimated annual operating costs) and efficiency information as required by the Federal Trade Commission.

##### **1.4 DELIVERY**

- A. Deliver appliances only after utility rough-in is complete and construction in the spaces to receive appliances is substantially complete and ready for installation.

## 1.5 WARRANTIES

- A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

## PART 2 - PRODUCTS

### 2.1 RESIDENTIAL APPLIANCES

- A. Microwave Oven: Undercabinet mounted microwave oven, listed by UL, and complying with requirements specified.
  - 1. Type: Undercabinet, capacity microwave oven with 1,000 W.
    - a. Controls: Solid-state, electronic, touch type.
    - b. Clock Type: Digital.
  - 2. Standard features include the following:
    - a. Automatic defrost.
    - b. Child lockout feature.
    - c. Cooking complete reminder.
- B. Under Counter Refrigerator: Under counter refrigerator, listed by UL, and complying with requirements specified.
  - 1. Type: Undercounter, frost-free, refrigerator with baked-enamel-on-steel interior cabinet liners.
  - 2. Temperature Controls: Separate temperature controls for each compartment and a switch for condensation-control heating element at freezer opening.
  - 3. Finish: Porcelain enamel on steel.
    - a. Color: White.
  - 4. Standard features include the following:
    - a. Interior light.
    - b. Adjustable compartment shelves.

### 2.2 FINISHES

- A. Porcelain-Enamel Finish: Provide manufacturer's standard factory-applied porcelain-enamel finish over cleaned and pretreated steel sheet. If no color is indicated, provide white.
  - 1. Color and Gloss: As selected by CM from manufacturer's full range.
  - 2. Where appliances by more than one manufacturer are installed in the same space, provide units with color matching largest equipment item.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine roughing-in for plumbing, mechanical, and electrical services, with Installer present, to verify actual locations of services before residential appliance installation.
  - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. General: Comply with manufacturer's written instructions.
- B. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.
- C. Freestanding Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.

- D. Utilities: Refer to Divisions 15 and 16 for plumbing and electrical requirements.

### 3.3 ADJUSTING AND CLEANING

- A. Test each item of residential appliances to verify proper operation. Make necessary adjustments.
- B. Verify that accessories required have been furnished and installed.
- C. Remove packing material from residential appliances and leave units in clean condition, ready for operation.

**END OF SECTION 11451**